WORK NOTICE
Mansion Grove Site
4101 Lick Mill Boulevard
Santa Clara, California

DTSC Announces Implementation of Pilot Study for Evaluation of *In-Situ* Chemical Oxidation at Agnews Developmental Center Property

The California Environmental Protection Agency, Department of Toxic Substances Control is distributing this work notification regarding upcoming field work on the Agnews Developmental Center property, immediately adjacent to the Mansion Grove Apartment Complex at 4101 Lick Mill Boulevard, in the City of Santa Clara, Santa Clara County, California. This work notice is being provided to residents of the Mansion Grove Apartment Complex to advise you about additional activities that will be conducted to evaluate enhancements to the existing groundwater and soil cleanup activities in this area.

- **Work is scheduled to begin November 10, 1999 and end approximately on January 30, 2000.**
- **Workers will be present at various times on the Agnews property between the hours of 8:00 a.m. and 5:00 p.m.**
- **The work is not anticipated to cause traffic, noise, or other impacts.**

Site Background

The Mansion Grove property was developed as an apartment complex beginning in the late 1980s following over 80 years of use as an industrial property. Soil and groundwater underlying the property have been impacted with volatile organic chemicals (principally, trichloroethene and perchloroethene) related to the industrial uses. Risks to human health and the environment were evaluated and no probable risks to human health related to residual chemicals in soil and groundwater at the Mansion Grove site were identified except for potential future uses of the groundwater for domestic purposes. The drinking water supplied to Mansion Grove comes primarily from the Hetch Hetchy Reservoir and occasionally from municipal wells located a depth of 350 to 650 feet.

Mallinckrodt, Inc. is presently conducting cleanup of the volatile organic chemicals impacting soil and groundwater. These actions include operation and maintenance of an onsite soil vapor extraction and treatment system, and an onsite and offsite groundwater extraction and treatment system. The impacted groundwater extends from the Mansion Grove property onto the adjacent

Agnews Developmental Center property. The soil vapor extraction and treatment system has operated since 1992 and the groundwater extraction and treatment system has operated since 1995.

Based on recent technological advancements in the area of *in-situ* (in-place) oxidation of volatile organic chemicals, Mallinckrodt is conducting this pilot study to test the feasibility of this technology at the Mansion Grove site. If the pilot study shows that the use of *in-situ* chemical oxidation is effective, use of that process could significantly shorten the timeframe and cost of cleanup actions at the Mansion Grove site. *In-situ* oxidation involves the injection of common chemical oxidants into the impacted groundwater to destroy the volatile organic chemicals in place. The resulting primary by-products of the reaction are non-toxic inert substances such as carbon dioxide and water that would not pose continued threat to the groundwater resources.

Planned Activities

Two small areas (approximately 20 x 20 feet each) on the Agnews property will be used to conduct the pilot study. Mallinckrodt will collect several soil samples and install 16 two-inch-diameter temporary monitoring wells to sample groundwater prior to and during the pilot study. Two separate chemical oxidants, sodium permanganate and hydrogen peroxide, will be tested. The oxidants will be injected into the impacted groundwater within the test areas. Groundwater and soil samples collected after treatment will be analyzed to evaluate the effectiveness of these oxidants in reducing the concentration of volatile organic compounds. Additional sampling is planned to evaluate any negative effects of this treatment approach.

The pilot study will include up to three separate chemical injection events and three post-treatment sampling events conducted over an approximate 12-week period as outlined above. Each injection and sampling event is anticipated to take approximately one day to complete.

For More Information, Contact:

California Environmental Protection Agency
Department of Toxic Substances Control
Virginia Lasky, Project Manager at (510) 540-3817 or
Bea McKamey, Public Participation Coordinator at (510) 540-3920

You may review information about the Mansion Grove Site at:

Mansion Grove Apartment Rental Office
502 Mansion Park Drive
Santa Clara, CA 95051
(408) 980-0502
or

Dept. of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, CA 94710
(510) 540-3800
(Call for appointment)